

GAO

United States General Accounting Office

Report to the Ranking Minority Member,
Committee on Armed Services,
House of Representatives

October 1994

MILITARY READINESS

DOD Needs to Develop a More Comprehensive Measurement System



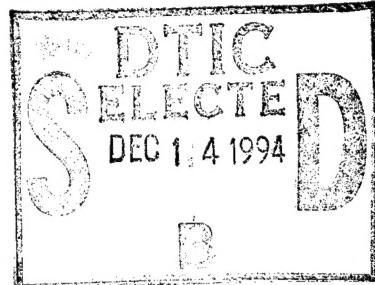
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National Security and
International Affairs Division

B-258015

October 27, 1994

The Honorable Floyd D. Spence
Ranking Minority Member
Committee on Armed Services
House of Representatives



Dear Mr. Spence:

This report addresses your concerns that declining defense budgets are increasing the potential for a return to the days of "hollow forces" that prevailed during the 1970s. More specifically, you asked that we conduct a review to determine (1) whether the definition and indicators of readiness adequately reflect the many complex components that contribute to overall military readiness and (2) whether there are current readiness indicators that can predict positive or negative changes in readiness.

Background

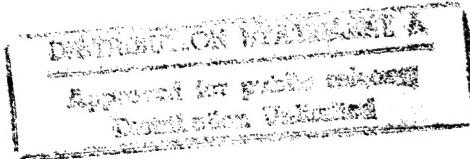
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During the past several years, service chiefs and commanders in chief (CINC) have expressed concerns about the effect on current and future readiness of (1) the level of current military operations, (2) contingency operations, (3) the shifting of funds to support these operations, and (4) personnel turbulence. Related to these concerns is a question about the ability of the Department of Defense's (DOD) readiness reporting system to provide a comprehensive assessment of overall readiness.

DOD's current system for reporting readiness to the Joint Chiefs of Staff (JCS) is the Status of Resources and Training System (SORTS). This system measures the extent to which individual service units possess the required resources and are trained to undertake their wartime missions. SORTS was established to provide the current status of specific elements considered essential to readiness assessments, that is, personnel and equipment on hand, equipment condition, and the training of operating forces. SORTS' elements of measure, "C" ratings that range from C-1 (best) to C-4 (worst), are probably the most frequently cited indicator of readiness in the military.

Results in Brief

The DOD definition and indicators for measuring readiness provide valuable information, but this information is limited and cannot signal an impending change in readiness. Moreover, the SORTS system was never intended to provide the comprehensive assessment of overall military



readiness that has become increasingly important in today's national security environment. For example, SORTS measures only individual service readiness; there are no indicators currently available to measure joint readiness.¹ Nor does SORTS address all the factors that JCS considers critical to a comprehensive readiness assessment, such as operating tempo and morale.

To supplement data reported in DOD's system and facilitate readiness assessments at the unit level, the military commands independently monitor numerous additional indicators. These indicators are generally not reported to higher command levels. We visited 39 military commands and other DOD agencies and compiled a list of over 650 such indicators. Discussions with military commanders in all four services and outside defense experts revealed that many of these indicators are not only critical to a comprehensive readiness assessment at the unit level but also have some degree of predictive value. The indicators do require, however, some further refinement to improve their usefulness.

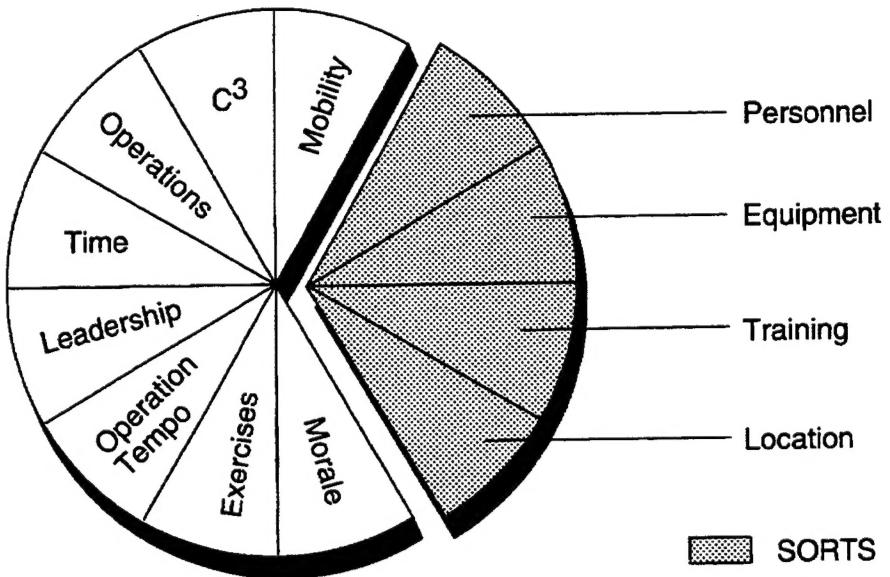
DOD's Current Approach to Measuring Readiness Has Limitations

According to JCS and DOD officials, the definition and measures of readiness that are currently available in SORTS are no longer adequate in today's national security environment. Specifically, SORTS does not (1) address all the factors that JCS considers critical, (2) provide a warning of impending decreases in readiness, and (3) provide data on joint readiness. In addition, SORTS includes subjective assessments of training proficiency.

Figure 1 shows those elements reported under SORTS and all the elements that JCS believes would make up a more comprehensive assessment.

¹Joint readiness is the level of preparedness of combatant commands and joint task forces to integrate ready combat and support units into an effective joint and combined operating force.

Figure 1: Factors Important to a Comprehensive Readiness Assessment



Information reported under SORTS is a snapshot in time and does not predict impending changes. Units report readiness monthly or, for some units, upon a change of status. These reports provide commanders and JCS with status information only for that point in time. Commanders have stated that in today's environment of force reductions and increasing commitments, there is a need for indicators that can predict readiness changes.

Some elements of SORTS are not based on objective data. The C-rating for training, for example, is based on a commander's subjective assessment of the number of additional training days the unit needs to reach a C-1 status. This assessment may be based on any number of factors, including completion of required or scheduled training or personal observation. In the past, we have found that Army training assessments have not been reliable. For example, in 1991 we reported that training readiness assessments of active Army units may have been overstated.² We reported that the information provided to higher commands and JCS was of limited value because the assessments (1) were based on training conducted

²Army Training: Evaluations of Units' Proficiency Are Not Always Reliable (GAO/NSIAD-91-72, Feb. 15, 1991).

primarily at home stations rather than on results of more realistic exercises conducted at combat training centers and (2) may not have adequately considered the effect that the loss of key personnel had on proficiency.

Likewise, in our reviews pertaining to the Persian Gulf War, we noted that readiness reports for Army support forces and National Guard combat forces were often inflated or unreliable.³ For example, in a September 1991 report, we noted that when three Army National Guard combat brigades were mobilized for Operation Desert Shield, their commanders were reporting readiness at the C-2 and C-3 levels, which meant that no more than 40 days of post-mobilization training would be needed for the brigades to be fully combat ready. However, on the basis of their independent assessment of the brigades' proficiency, active Army officials responsible for the brigades' post-mobilization training developed training plans calling for over three times the number of days that the readiness reports stated were needed.

Finally, SORTS does not provide data with which commanders can adequately assess joint readiness. There is no clear definition of areas of joint readiness that incorporates all essential elements, such as individual service unit readiness, the deployability of forces, or en route and theater infrastructure support.⁴

The need for joint readiness information was demonstrated by the Persian Gulf War and reaffirmed by contingency operations in Somalia and Bosnia. Officials at four joint commands told us that SORTS, the primary source of readiness data, was inadequate for assessing joint readiness. Although the Joint Staff recently developed its first list of joint mission tasks, it has not developed the training conditions for conducting joint exercises and criteria for evaluating them. It may be several years before JCS completes these efforts.

DOD Efforts to Improve Readiness Assessments

Recognizing the limitations of SORTS and the need for more reliable readiness information, DOD and the services have initiated actions to improve readiness assessments.

³National Guard: Peacetime Training Did Not Adequately Prepare Combat Brigades for Gulf War (GAO/NSIAD-91-263, Sept. 24, 1991) and Operation Desert Storm: Army Had Difficulty Providing Adequate Active and Reserve Support Forces (GAO/NSIAD-92-67, Mar. 10, 1992).

⁴Recently published findings of a DOD Defense Science Board task force support this.

In June 1994 the Defense Science Board Readiness Task Force, which is composed of retired general officers, issued its report to the Secretary of Defense on how to maintain readiness. The Task Force identified major shortcomings in assessing joint readiness and noted that while the services have increased their commitment to joint and combined training since Operation Desert Storm, such training requires greater emphasis. The Task Force recommended improvements in the measurement of joint readiness, stating that "real readiness must be measured by a unit's ability to operate as part of a joint or combined task force."

More recently, DOD created the Senior Readiness Oversight Council to evaluate and implement the recommendations of the Readiness Task Force and to develop new ways to measure combat readiness. The Council, whose membership includes high-level military and civilian officials, is focusing on three main ways to improve readiness:

(1) developing better analytical tools for determining the relationship of resources to readiness and predicting the potential impact of budget cuts on readiness, (2) developing analytical tools for measuring joint readiness, and (3) taking advantage of computer simulation to improve readiness, especially joint readiness.

The Army implemented its Readiness Management System in June 1993. This system allows the Army to project for 2 years the status of elements reported under SORTS. The system integrates the reported SORTS data with other databases that contain future resource acquisition and distribution information. The Army can, for example, compare a unit's reported equipment shortages with planned acquisition and distribution schedules, and the system can then forecast when those shortages will be alleviated and the unit's readiness posture improved.

In September 1993, the Air Force began to develop a computer model, called ULTRA, to forecast readiness. ULTRA is intended to measure four major elements: (1) the ability to deploy the right forces in a timely manner to achieve national objectives; (2) the ability to sustain operations; (3) the personnel end strength, quality, and training of people; and (4) the availability of facilities. If successful, the system will allow the Air Force to estimate the effect that various levels of funding have on readiness. The project is still under development, and the Air Force estimates it will be about 2 years before the system will provide credible, widely accepted forecasts.

A More Comprehensive Assessment of Readiness Is Possible

To supplement data currently reported in SORTS and facilitate readiness assessments at the unit level, the military commands in all four services independently monitor literally hundreds of additional indicators. These indicators are generally not reported to higher command levels. Military commanders and outside defense experts agreed that many of the indicators are not only critical to a comprehensive readiness assessment at the unit level but also have some degree of predictive value regarding readiness changes within the services.

We compiled a list of over 650 indicators that 28 active and reserve service commands were monitoring in addition to SORTS. To further refine these indicators, we asked the commands to rate the indicators in three areas: (1) the importance of the indicator for assessing readiness, (2) the degree of value the indicator has as a predictor of readiness change, and (3) the quality of the information the indicator provides.

Table 1 shows the readiness indicators that service officials told us were either critical or important to a more comprehensive assessment of readiness and that also have some predictive value. The indicators that are shaded are those rated highest by at least one-half of the commands visited.

Table 1: Readiness Indicators Critical or Important to Predicting Readiness

Category/subcategory		Total commands in study by service									
		Air Force	Army	Navy	Marine Corps	Total					
Indicator	Definition	Number of commands reporting indicators									
Personnel											
Personnel strength											
1	Personnel deployability status ^a	Data showing numbers of personnel by grade who are not deployable due to medical or dental problems, personal hardship, or lack of essential training	1	4	9	6	20				
2	Projected personnel trends	Comparisons of future personnel requirements with projected personnel availability	1	0	5	1	7				
3	Crew manning ^a	Percentage of crews fully qualified, grades of crew members, and experience of crew members	2	3	0	0	5				
4	Recruiting shortfalls	Number of personnel recruited and placed in units compared to recruiting goals	0	2	0	0	2				
Personnel turbulence											
5	Personnel stability	Personnel turnover, attrition, and retention rates	0	4	4	5	13				
6	Personnel tempo	Numbers of personnel deployed to meet assigned missions or unit taskings	0	2	0	2	4				
7	Borrowed manpower	Number of personnel (1) performing duties at bases in the continental United States that are not the same as required by their assigned Military Occupational Specialty and (2) not consistently training with their assigned units	0	3	1	0	4				
8	Crew turnover ^a	Percentage of crews by weapon system type where crew members were transferred, replaced, or interchanged	0	2	2	0	4				
Other											
9	Personnel morale	Subjective assessment based on indicators such as incidences of article 15a, court martials, drug/alcohol abuse, spouse/child abuse, reenlistment rates, unit climate assessments, days deployed per individual, pay comparability, promotion rates, and career advancement opportunities	0	3	5	3	11				
Training											
10	Unit readiness and proficiency ^b	Inspections, evaluations, and exercises including Combat Training Center rotations used to assess how well the unit is prepared to perform its mission	3	5	6	5	19				
11	Operational tempo	Level of operational and training activity against specific standards	4	6	4	4	18				

Category/subcategory		Total commands in study by service				
		Air Force	Army	Navy	Marine Corps	Total
		5	6	10	7	28
Indicator	Definition	Number of commands reporting indicators				
Training (Continued)						
12 Weapon systems proficiency ^a	Certifications, qualifications, and other indicators of individual and crew proficiency in military operations and weapons employment	3	5	7	1	16
13 Funding	Current and projected funding available for operations, training, and maintenance in units	2	3	7	9	15
14 Completion of required and specialty training ^a	Numbers and/or percentages of personnel completing required or specialty training in a specific period	2	2	5	4	13
15 Commitments and deployments	Number and types of missions/commitments that (1) require all or part of a unit's resources or (2) do not provide an opportunity to train in all essential unit tasks	0	0	0	4	4
16 Accidents	Percentage of accidents in relation to standard measures, e.g., accidents per 100,000 flying hours	1	1	2	0	4
Logistics						
Equipment fill						
17 Deployed equipment	Numbers and percentages of equipment that are pre-positioned or deployed in relation to authorized equipment	0	0	0	2	2
18 Equipment distribution	Excess equipment made available by downsizing of the force compared to shortages or old equipment requiring replacement	0	0	0	2	2
Equipment condition						
19 Not mission capable rate	Percentages of not mission capable equipment due to supply, maintenance, or both	3	1	7	0	11
20 Equipment availability	Present and projected equipment availability rates	3	2	0	3	8
21 Fully mission capable rate for non-pacing equipment	Fully mission capable rates for equipment not reported in SORTS but nevertheless necessary for mission accomplishment	0	1	0	0	1
Equipment maintenance						
22 Unit and intermediate maintenance performance	Performance of unit level and intermediate maintenance activities compared to established standards. Indicators include (1) number of items in maintenance over a set number of days, (2) scheduling effectiveness, and (3) average number of items processed	3	4	6	4	17

Category/subcategory		Total commands in study by service					
		Air Force	Army	Navy	Marine Corps	Total	
		5	6	10	7	28	
	Indicator	Definition		Number of commands reporting indicators			
Equipment maintenance (Continued)							
23	Maintenance backlog ^c	The number and dollar value of maintenance actions that were not accomplished when needed	0	3	3	0	6
24	Depot maintenance performance	Performance of depot level maintenance activities compared to established standards. Indicators include (1) number of items in maintenance over a set number of days, (2) scheduling effectiveness, and (3) average number of items processed	1	0	0	2	3
Supply							
25	Supply performance	Performance of unit-level supply activities compared to established standards, such as percent of requests filled from on hand stock or cannibalizations per 100 flying hours to identify inventory trends and needed items	3	2	3	1	9
26	Availability of ammunition and spares ^d	On-hand assets compared with prescribed or authorized levels	0	1	2	5	8

^aIndicators especially critical for the reserve components.

^bData should also be maintained on individuals with Combat Training Center experience.

^cReadiness Task Force commented that maintenance backlogs should be purged of irrelevant items to make this a more useful indicator.

^dReadiness Task Force commented that on-hand and programmed purchase of precision-guided munitions should be specifically monitored.

We asked the Defense Science Board Task Force on Readiness to examine the indicators presented in table 1. Task Force members agreed with the commands' ratings and said that the indicators are an excellent beginning for developing a more comprehensive readiness measurement system. The Task Force suggested four additional indicators: (1) the use of simulators to improve individual and crew proficiency on weapon systems; (2) the quality of recruits enlisted by the services; (3) equipment readiness based on fully mission capable rates rather than on mission capable rates, which permit a weapon system to be reported as mission capable even though it cannot fully perform its mission; and (4) the extent to which readiness-related information in DOD is automated. In commenting on a

draft of this report DOD pointed out that it is useful to know if a system having a multimission capability can perform parts of the mission, therefore, it believes that both fully mission capable and mission capable rates are useful indicators. Also, DOD said that the extent to which readiness-related information is automated is not an indicator of readiness but that it might be helpful in obtaining an understanding of automation requirements. We agree with DOD's position on these two issues.

As table 1 shows, some indicators are supported more by commanders of one service than by the others. For example, information on commitments and deployments (Training, item 15) and deployed equipment (Logistics, item 17) were assessed as critical by Marine Corps commanders because of the manner in which its forces and equipment are deployed. They were not listed as critical by any of the commands from the other services.

By examining a group or series of indicators, one may gain a broader insight than is possible from a single indicator. To illustrate, changes in the extent of borrowed manpower (Personnel, item 7) may be related to proficiency on weapon systems (Training, item 12) or crew turnover (Personnel, item 8). Also, table 1 identifies indicators that because of restricted training time and opportunities are especially critical to the reserve components.

Several of the indicators that commanders rated as critical to readiness assessments relate to major readiness concerns recently expressed by service chiefs and CINCs. For example, while in the midst of downsizing, U.S. military forces are being called upon for operational contingencies—delivering humanitarian aid in Iraq, Bosnia, Rwanda, and Somalia and enforcing “no-fly” zones in Bosnia and Iraq, to name just a few. Unusually high operating tempos required for these contingencies have exacerbated the turbulence inherent in a major downsizing of U.S. forces. Several senior service leaders have raised concerns about the impact of this situation on morale, retention, and the ability to maintain readiness for traditional warfighting missions. Among the indicators suggested by some of the command officials we interviewed were personnel tempo, a measure of the frequency and number of personnel deployed on assigned missions, and crew turnover, a measure of personnel turnover within weapon system crews. Similarly, the services report that they were required to shift funds from operations and maintenance appropriations to support contingency operations, and, according to officials of each of the services, some scheduled training exercises were canceled and others were postponed. Several commanders

suggested readiness indicators related to operating tempo, funding levels, and individual/unit proficiency.

Related to the feature of predictive capability is the ability to conduct trend analyses based on the most important indicators. Assuming that relevant data is available, the services can identify trends in the additional indicators over time. However, no criteria are currently available to assess the meaning of a trend in terms of its impact on readiness. During our visits to the military commands, we noted an unevenness in the availability of historical data, depending on the indicator being monitored. Also, the commands reported that there is unevenness in the quality of the data available for measurement. While some indicators were rated high in importance, they were rated low in quality.

Recommendations

We recommend that the Secretary of Defense direct the Under Secretary of Defense for Personnel and Readiness to develop a more comprehensive readiness measurement system to be used DOD-wide. We recommend that as part of this effort, the Under Secretary

- review the indicators we have identified as being critical to predicting readiness and select the specific indicators most relevant to a more comprehensive readiness assessment,
- develop criteria to evaluate the selected indicators and prescribe how often the indicators should be reported to supplement SORTS data, and
- ensure that comparable data is maintained by all services to allow the development of trends in the selected indicators.

Agency Comments and Our Evaluation

In written comments on a draft of our report, DOD generally agreed with our findings and recommendation (see app. I). The Department said that it plans to address the issue of using readiness indicators not only to monitor force readiness but also to predict force readiness. In response to our recommendation, DOD said that it is developing a specification for a readiness prediction system and that it has already used the indicators presented in our report as input to that process.

DOD did not agree with our assessment of the overall value of SORTS information and the reliability of training ratings contained in SORTS. First, DOD said that it did not agree that SORTS information provided to higher commands and JCS is of limited value. We agree that SORTS provides valuable information on readiness. Nevertheless, the system does have

several limitations. The matters discussed in the report are not intended as criticisms of SORTS but rather as examples of limitations that are inherent in the system. For example, C-ratings represent a valuable snapshot of readiness in time but by design they do not address long-term readiness or signal impending changes in the status of resources. Second, DOD said that it did not agree that SORTS may not adequately consider the effect that the loss of key personnel has on proficiency. DOD may have misinterpreted our position on this issue. Although SORTS recognizes the loss of key personnel, it does not always consider the impact of replacing key personnel with less experienced personnel. Lastly, DOD cited a number of factors that it believes make it infeasible to base training readiness on the results of combat training center exercises. This report does not propose that DOD take this course of action. Reference to the fact that training readiness is based primarily on training conducted at home stations rather than on results of more realistic exercises conducted at combat training centers is intended only to illustrate how the reliability of SORTS training information can be effected.

Scope and Methodology

To assess the adequacy of the current definition and indicators of readiness, we examined military service and JCS regulations, reviewed the literature, and interviewed officials from 39 DOD agencies, including active and reserve service commands, defense civilian agencies, unified commands, and the Joint Staff (see app. II). To identify indicators that are being monitored to supplement SORTS data, we asked the 39 agencies to identify all the indicators they use to assess readiness and operational effectiveness.⁵ After compiling and categorizing the indicators by type, that is, personnel, training, and logistics, we asked the commands to rate the indicators' significance, predictive value, and quality. Indicator significance was rated as either critical, important, or supplementary. The commands' opinions of predictive value were provided on a five-point scale ranging from little or none to very great. The quality of the indicator was rated on a three-point scale—low, medium, and high.

We asked the Defense Science Board's Task Force on Readiness to (1) review and comment on the indicators that the commands rated the highest in terms of their importance and predictive value and (2) identify additional indicators that, in their judgment, were also critical to a comprehensive readiness assessment.

⁵Of the 39 DOD agencies, 28 monitored additional readiness indicators.

We conducted our review from May 1993 to June 1994 in accordance with generally accepted government auditing standards.

As agreed with your office, unless you publicly announce this report's contents earlier, we plan no further distribution until 30 days from its issue date. At that time, we will send copies to the Chairmen of the Senate and House Committees on Armed Services and on Appropriations; the Subcommittee on Military Readiness and Defense Infrastructure, Senate Armed Services Committee; and the Subcommittee on Readiness, House Armed Services Committee; and to the Secretaries of Defense, the Army, the Navy, and the Air Force. Copies will also be made available to others on request.

Please contact me at (202) 512-5140 if you or your staff have any questions concerning this report. Major contributors to this report are listed in appendix III.

Sincerely yours,



Mark E. Gebicke
Director, Military Operations
and Capabilities Issues

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Abbreviations

CINC	commanders in chief
DOD	Department of Defense
JCS	Joint Chiefs of Staff
SORTS	Status of Resources and Training System

Comments From the Department of Defense



PERSONNEL AND
READINESS

UNDER SECRETARY OF DEFENSE
4000 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-4000

SEP 26 1994



Mr. Mark E. Gebicke
Director, Military Operations and Capabilities Issues
National Security and International Affairs Division
U.S. General Accounting Office
Washington, DC 20548

Dear Mr. Gebicke:

The Department of Defense (DoD) generally concurs with the General Accounting Office (GAO) draft report "MILITARY READINESS: DoD Needs to Develop a More Comprehensive Measurement System," dated August 10, 1994 (GAO Code 703014), OSD Case 9761. Detailed DoD comments on the report findings and recommendations are provided in the enclosure.

The Department agrees with the need to improve its force readiness assessments; however, the challenge has been in determining the appropriate readiness indicators. Our October meeting of the Senior Readiness Oversight Council will tackle that specific issue.

It is important to recognize that force readiness depends on both the condition of the unit as well as its intended use. A unit which may be experiencing significant deficiencies in accomplishing one type of mission may be fully capable for another. An assessment system based on fixed indicators is only one input to knowledgeable commanders who must interpret the ratings and then make judgments about the readiness of the force to carry out the national military strategy.

Thank you for allowing the Department the opportunity to comment on the GAO draft report.

Sincerely,

Edwin Dom

Enclosure:
As stated



**GAO DRAFT REPORT - DATED AUGUST 10, 1994
(GAO CODE 703014) OSD CASE 9761**

**"MILITARY READINESS: DOD NEEDS TO DEVELOP A MORE
COMPREHENSIVE MEASUREMENT SYSTEM"**

DEPARTMENT OF DEFENSE COMMENTS

* * * *

FINDINGS

- o **FINDING A: The Status of Resources and Training System.** The GAO reported that, during the past several years, Service Chiefs and Commanders in Chief (CINCs) have expressed concerns about the effect on current and future readiness of (1) the level of current military operations, (2) contingency operations, (3) the shifting of funds to support those operations, and (4) personnel turbulence. The GAO asserted that related to these concerns is a question about the ability of the DoD readiness reporting system to provide a comprehensive assessment of overall readiness.

The GAO reported that the Status of Resources and Training System (SORTS) is the current DoD system for reporting readiness to the Joint Chiefs of Staff (JCS). The GAO explained that the SORTS measures the extent to which individual Service units possess the required resources and are trained to undertake their wartime missions. The GAO noted that the SORTS was established to provide the current status of specific elements considered essential to readiness assessments—that is, personnel and equipment on hand, equipment condition, and the training of operating forces. The GAO indicated that the SORTS elements of measure—termed "C" ratings that range from C-1 (best) to C-5 (worst)—are probably the most frequently cited indicator of readiness in the military. (pp. 1-2/GAO Draft Report)

DOD RESPONSE: Concur.

- o **FINDING B: The DoD Current Approach to Measuring Readiness Has Limitations.** The GAO determined that information reported under the SORTS is a snapshot in time and does not predict impending changes. The GAO noted that units report readiness monthly or, for some units, upon a change of status. The GAO further noted that the reports provide commanders and the JCS with status information only for that point in time. The GAO indicated that commanders have stated that in today's environment of force reductions and increasing commitments, there is a need for indicators that can predict readiness changes.

The GAO found that some elements of the SORTS are not based on objective data. The GAO cited, as an example, the C-1 rating for training, which is based on a commander's subjective assessment of the number of additional training days the unit needs to reach a C-1 status. The GAO determined that assessments may be based on any number of factors, including completion of required or scheduled

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Appendix I
Comments From the Department of Defense

training or personal observation. The GAO observed that, in the past, it found that Army training assessments have not been reliable. The GAO pointed out an example in its February 1991 report (OSD Case 8544) that training readiness assessments of active Army units may have been overstated. The GAO reported that the information provided to higher commands and the JCS was of limited value because the assessments (1) were based on training conducted primarily at home stations, rather than on results of more realistic exercises conducted at combat training centers and (2) may not have adequately considered the effect that the loss of key personnel had on proficiency. Likewise, the GAO reviews pertaining to the Persian Gulf War (OSD Cases 8769 and 8919) noted that readiness reports for Army support forces and National Guard combat forces were often inflated or unreliable.

The GAO also reported that the SORTS does not provide data with which commanders can adequately assess joint readiness. The GAO explained that there is no clear definition of areas of joint readiness that incorporates all essential elements, such as individual Service unit readiness, the deployability of forces, or en route and theater infrastructure support.

The GAO concluded that the need for joint readiness information was demonstrated by the Persian Gulf War and reaffirmed by contingency operations in Somalia and Bosnia. The GAO noted that officials at four joint commands advised that the SORTS—the primary source of readiness data—was inadequate for assessing joint readiness. (pp. 3-5/GAO Draft Report)

Now on pp. 2-4.

DOD RESPONSE: Partially concur. The DoD does not agree that the SORTS information provided to higher commands and the JCS is of limited value and does not account for missing key personnel. If the reports were based on training performed at combat training centers, the information would not be timely, since rotation to combat training centers occurs less than twice a year. Further, the reports would only cover a few units, since combat support and combat service support units, with a few exceptions, do not train at combat training centers. In addition, the reports would not be comparable across units, since the evaluations are diagnostic and do not compare each unit to the same standard.

The Department has recognized the need for a system to assess joint readiness. The Senior Readiness Oversight Council is currently reviewing alternative methods to accomplish that goal.

o **FINDING C: The DoD Efforts to Improve Readiness Assessments.** The GAO reported that in recognizing the limitations of the SORTS and the need for more reliable readiness information, the DoD and the Services have initiated actions to improve readiness assessments. The GAO reported that in June 1994, the Defense Science Board Readiness Task Force reported to the Secretary of Defense on how to maintain readiness. The GAO noted that the Task Force, identified major shortcomings in assessing joint readiness, and noted that while the Services have

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Appendix I
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increased their commitment to joint and combined training since Operation Desert Storm, such training requires greater emphasis. The GAO pointed out that the Task Force recommended improvements in the measurement of joint readiness, stating that "real readiness must be measured by a unit's ability to operate as part of a joint or combined task force."

The GAO also reported that, more recently, the DoD created the Senior Readiness Oversight Council to evaluate and implement the recommendations of the Readiness Task Force and to develop new ways to measure combat readiness. The GAO noted that the Council is focusing on: (1) developing better analytical tools for determining the relationship of resources to readiness and predicting the potential impact of budget cuts on readiness, (2) developing analytical tools for measuring joint readiness, and (3) taking advantage of computer simulation to improve readiness, especially joint readiness.

The GAO observed that the Army implemented its Readiness Management System in June 1993 which allows the Army to project for 2 years the status of elements reported under the SORTS. The GAO noted that the system integrates the reported SORTS data with other databases that contain future resource acquisition and distribution information. The GAO pointed out that the Army can, for example, compare a unit's reported equipment shortages with planned acquisition and distribution schedules, and the system can then forecast when those shortages will be alleviated and the unit's readiness posture improved.

The GAO also observed that, in September 1993, the Air Force began to develop a computer model, called ULTRA, to forecast readiness. The GAO noted that ULTRA is intended to measure four major elements: (1) the ability to deploy the right forces in a timely manner to achieve national objectives; (2) the ability to sustain operations; (3) the personnel end strength, quality, and training of people; and (4) the availability of facilities. The GAO concluded that, if successful, the system will allow the Air Force to estimate the effect that various levels of funding have on readiness. The GAO pointed out that the project is still under development, and the Air Force estimates it will be about 2 years before the system will provide credible, widely accepted forecasts. (pp. 5-7/GAO Draft Report)

Now on pp. 4-6.

DOD RESPONSE: Concur.

- o **FINDING D: A More Comprehensive Assessment of Readiness Is Possible.** The GAO reported that, to supplement data currently reported in the SORTS and facilitate readiness assessments at the unit level, the military commands in all four Services independently monitor hundreds of additional indicators which are generally not reported to higher command levels. The GAO noted that military commanders and outside Defense experts agreed that many of the indicators are not only critical to a comprehensive readiness assessment at the unit level, but also have some degree of predictive value regarding readiness changes within the Services.

The GAO compiled a list of over 700 indicators that 28 active and reserve Service commands were monitoring in addition to the SORTS. To further refine those indicators, the GAO asked the commands to rate the indicators in three areas: (1)

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Appendix I
Comments From the Department of Defense

the importance of the indicator for assessing readiness, (2) the degree of value the indicator has as a predictor of readiness change, and (3) the quality of the information the indicator provides. The GAO asked the DoD Readiness Task Force to examine the indicators. The GAO reported that Task Force members agreed with the commands' ratings and said that the indicators are an excellent beginning for developing a more comprehensive readiness measurement system. The GAO also reported that the Task Force recommended four additional indicators: (1) the use of simulators to improve individual and crew proficiency on weapon systems; (2) the quality of recruits enlisted by the Services; (3) equipment readiness based on fully mission capable rates, rather than on mission capable rates which permit a weapon system to be reported as mission capable even though it cannot fully perform its mission; and (4) the extent to which readiness-related information in the DoD is automated.

The GAO observed that several of the indicators that commanders rated as critical to readiness assessments relate to major readiness concerns recently expressed by Service chiefs and the CINCs. The GAO noted that while in the midst of downsizing, U.S. military forces are being called upon for operational contingencies—delivering humanitarian aid in Iraq, Bosnia, Rwanda, and Somalia and enforcing "no-fly" zones in Bosnia and Iraq. The GAO concluded that unusually high operating tempos required for those contingencies have exacerbated the turbulence inherent in a major downsizing of U.S. forces. The GAO pointed out that several senior Service leaders have raised concerns about the impact of that situation on morale, retention, and the ability to maintain readiness for traditional warfighting missions. The GAO emphasized that among the indicators suggested by some of the command officials were personnel tempo—a measure of the frequency and number of personnel deployed on assigned missions, and crew turnover—a measure of personnel turnover within weapon system crews. The GAO noted the Services report that they were required to shift funds from operations and maintenance appropriations to support contingency operations and, according to officials in each of the Services, some scheduled training exercises were canceled and others were postponed. The GAO indicated that several commanders suggested readiness indicators related to operating tempo, funding levels, and individual/unit proficiency. (pp. 7-11/GAO Draft Report)

Now on pp. 6-11.

DOD RESPONSE: Partially concur. The Readiness Task Force recommended that equipment readiness ratings be based on fully mission capable rates. Although it is important to know if a system is fully functional, it is also important to know if a system, which has multi-mission capability, can perform parts of the multi-mission role. Therefore, both fully mission capable and mission capable rates are of interest.

It should be understood that item 4 of the Readiness Task Force suggestions, "the extent to which readiness-related information is automated," is not an indicator of readiness. It might, however, be a help in developing an understanding of the need for more automation.

* * * *

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Now on p. 11.

RECOMMENDATION

- o **RECOMMENDATION:** The GAO recommended that the Secretary of Defense direct the Under Secretary of Defense for Personnel and Readiness to develop a more comprehensive readiness measurement system to be used DoD-wide. The GAO further recommended that as part of that effort, the Under Secretary should (1) review the indicators that the GAO identified as being critical to predicting readiness and select the specific indicators most relevant to a more comprehensive readiness assessment; (2) develop criteria to evaluate the selected indicators and prescribe the frequency that the indicators should be reported to supplement the SORTS data; and (3) ensure that comparable data is maintained by all the Services to allow the development of trends in the selected indicators. (p. 12/GAO Draft Report)

DOD RESPONSE: Concur. The Department is in the process of developing a more comprehensive readiness prediction system, with the Senior Readiness Oversight Council reviewing alternative ways that might be used to improve joint readiness assessments. The indicators included in the GAO report are being considered as part of that effort. The results of that effort will be reviewed by the Senior Readiness Oversight Council at its next meeting, planned for October 1994.

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Locations Visited

Army

Secretary of the Army
Washington, D.C.

4th Infantry Division (Mechanized)
Fort Carson, Colorado

18th Airborne Corps
Fort Bragg, North Carolina

24th Infantry Division
Fort Stewart, Georgia

Corps Support Command
18th Airborne Corps
Fort Bragg, North Carolina

Headquarters, Forces Command
Fort McPherson, Georgia

Headquarters, Training and Doctrine Command
Fort Monroe, Virginia

National Guard Bureau
Washington, D.C.

U.S. Army Reserve Command
Atlanta, Georgia

Navy

Secretary of the Navy
Washington, D.C.

Carrier Air Wing Three
Norfolk, Virginia

Destroyer Squadron Two
Norfolk, Virginia

Naval Air Force
U.S. Atlantic Fleet
Norfolk, Virginia

Appendix II
Locations Visited

Naval Air Reserve Force
New Orleans, Louisiana

Naval Reserve Force
New Orleans, Louisiana

Naval Surface Force
U.S. Atlantic Fleet
Norfolk, Virginia

Naval Surface Reserve Force
New Orleans, Louisiana

Submarine Force
U.S. Atlantic Fleet
Norfolk, Virginia

Submarine Squadron Eight
Norfolk, Virginia

U.S. Atlantic Fleet
Norfolk, Virginia

Air Force

Secretary of the Air Force
Washington, D.C.

1st Tactical Fighter Wing
Langley Air Force Base, Virginia

375th Air Wing
Scott Air Force Base, Illinois

Air Combat Command
Langley Air Force Base, Virginia

Air Force Reserve
Washington, D.C.

Air Mobility Command
Scott Air Force Base, Illinois

Appendix II
Locations Visited

Marine Corps

Office of the Inspector General
Washington, D.C.

Headquarters, Marine Forces Atlantic
Norfolk, Virginia

Marine Reserve Force
Fleet Marine Force
U.S. Marine Corps Reserve
New Orleans, Louisiana

Second Force Service Support Group
Camp Lejeune, North Carolina

Second Marine Air Wing
Marine Corps Air Station
Cherry Point, North Carolina

Second Marine Division
Camp Lejeune, North Carolina

Second Marine Expeditionary Force
Camp Lejeune, North Carolina

Second Surveillance, Reconnaissance, Intelligence Group
Camp Lejeune, North Carolina

Unified Commands

Commander in Chief, Special Operations Command
MacDill Air Force Base, Florida

Commander in Chief, Central Command
MacDill Air Force Base, Florida

Commander in Chief, Pacific Command
Camp Smith, Hawaii

Commander in Chief, U.S. Atlantic Command
Norfolk Naval Base, Virginia

Appendix II
Locations Visited

Other

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